US010537111B2

(12) **United States Patent**
Jacobson et al.

(10) **Patent No.: US 10,537,111 B2**
(45) **Date of Patent: *Jan. 21, 2020**

(54) **MULTI-LAYERED FOOD PRODUCT AND METHOD FOR FORMING**

(71) Applicant: **Arlington Valley Farms LLC**, Cleveland Heights, OH (US)

(72) Inventors: **Peter Jacobson**, Cleveland Heights, OH (US); **Marc De Longree**, Genval (BE)

(73) Assignee: **Arlington Valley Farms LLC**, Cleveland Heights, OH (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 321 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **15/296,088**

(22) Filed: **Oct. 18, 2016**

(65) **Prior Publication Data**

US 2017/0035065 A1 Feb. 9, 2017

Related U.S. Application Data

(60) Division of application No. 13/419,505, filed on Mar. 14, 2012, which is a continuation-in-part of application No. 12/958,313, filed on Dec. 1, 2010.

(60) Provisional application No. 61/265,457, filed on Dec. 1, 2009.

(51) **Int. Cl.**
A21D 13/31 (2017.01)
A21D 8/06 (2006.01)

(52) **U.S. Cl.**
CPC ***A21D 13/31*** (2017.01); ***A21D 8/06*** (2013.01)

(58) **Field of Classification Search**
CPC A23L 13/62; A21D 13/11; A21D 13/10
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,250,625	A	5/1966	Thelen	
4,517,203	A	5/1985	Levine et al.	
4,877,629	A *	10/1989	Stypula	A23P 20/12 426/302
4,948,603	A	8/1990	Bemacchi et al.	
5,194,271	A	3/1993	Yasosky	
5,520,937	A	5/1996	Yasosky et al.	
5,614,240	A	3/1997	Young	
5,955,129	A	9/1999	Haas, Sr. et al.	
6,013,300	A	1/2000	Reichkitzer et al.	
6,265,005	B1	7/2001	Haverkos et al.	
6,511,691	B1	1/2003	Willoughby et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

EP	0540521	3/1995
EP	0540521 B1	3/1995

(Continued)

OTHER PUBLICATIONS

Non-Final Office Action for U.S. Appl. No. 13/419,505 dated Mar. 13, 2013, 17 pages.

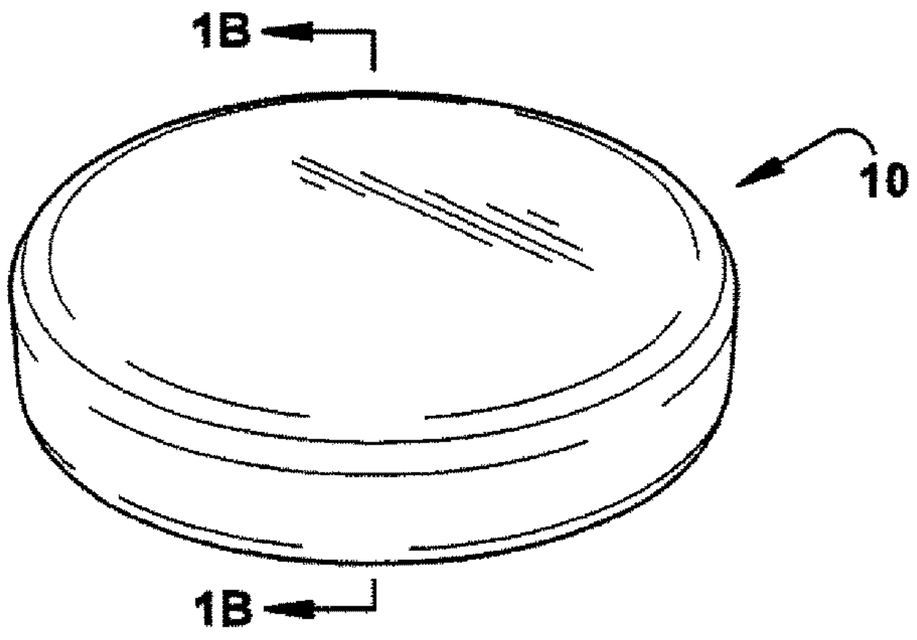
(Continued)

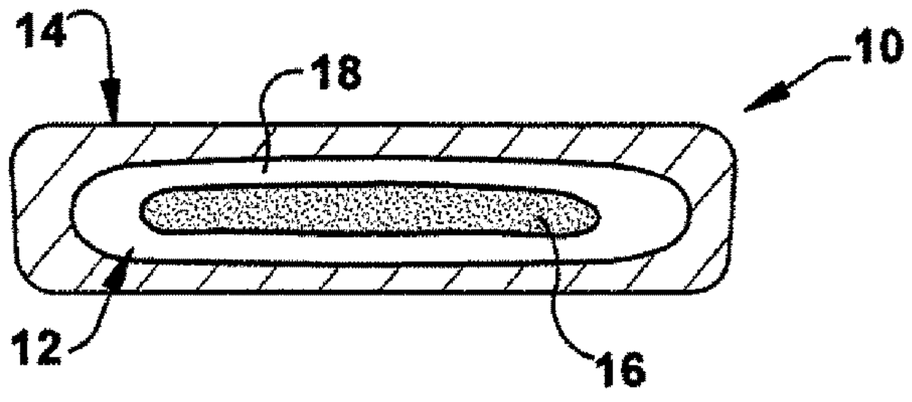
Primary Examiner — Erik Kashnikow
Assistant Examiner — Lela S. Williams
(74) *Attorney, Agent, or Firm* — Fay Sharpe LLP

(57) **ABSTRACT**

A multi-layered food product comprises a filling encapsulated by a substantially baked yeast-leavened dough. The encapsulated filling is further encapsulated by a substantially baked chemically-leavened batter layer.

23 Claims, 9 Drawing Sheets





(56) **References Cited**

U.S. PATENT DOCUMENTS

6,623,778	B2	9/2003	Kershman et al.
2002/0068115	A1	7/2002	Hayes-Jacobson
2002/0094366	A1	7/2002	Kershman et al.
2004/0018287	A1	1/2004	Kershman et al.
2004/0081934	A1	4/2004	Haas et al.
2004/0219271	A1	11/2004	Belknap et al.
2005/0025862	A1	2/2005	Morad et al.
2005/0048182	A1	3/2005	King et al.
2006/0073246	A1	4/2006	Valenzky et al.
2006/0121160	A1	6/2006	Preppemau et al.
2008/0057157	A1	3/2008	Almeida et al.
2008/0248168	A1	10/2008	Black
2009/0081347	A1	3/2009	Gambino
2011/0135792	A1	6/2011	Jacobson et al.

FOREIGN PATENT DOCUMENTS

EP	0683982	11/1995
WO	2005/112664	12/2005
WO	2011068902	6/2011
WO	2013138581	9/2013

OTHER PUBLICATIONS

Final Office Action for U.S. Appl. No. 13/419,505 dated Jan. 17, 2014, 18 pages.

International Search Report for PCT Application No. PCT/US2010/058601 dated Aug. 23, 2011, 3 pages.

Written Opinion for PCT Application No. PCT/US2010/058601 dated Aug. 23, 2011, 4 pages.

International Search Report for PCT Application No. PCT/US2013/031294 dated May 7, 2013, 4 pages.

Written Opinion for PCT Application No. PCT/US2103/031294 dated May 7, 2013, 5 pages.

Non-Final Office Action for U.S. Appl. No. 12/958,313 dated Apr. 13, 2012, 18 pages.

Final Office Action for U.S. Appl. No. 12/958,313 dated Mar. 13, 2013, 13 pages.

Non-Final Office Action for U.S. Appl. No. 12/958,313 dated Mar. 12, 2014, 15 pages.

Final Office Action for U.S. Appl. No. 12/958,313 dated Dec. 2, 2014, 16 pages.

Non-Final Office Action for U.S. Appl. No. 12/958,313 dated Mar. 13, 2015, 11 pages.

Heder, Jon; Taco Town; Saturday Night Live Transcripts; Oct. 8, 2005, 2 pages.

Lauterbach, et al. "Functions of Baking Ingredients", Nebraska Cooperative Extension NF94-186, Issued Mar. 1994.

Final Office Action for U.S. Appl. No. 12/958,313 dated Feb. 17, 2016, 23 pages.

* cited by examiner

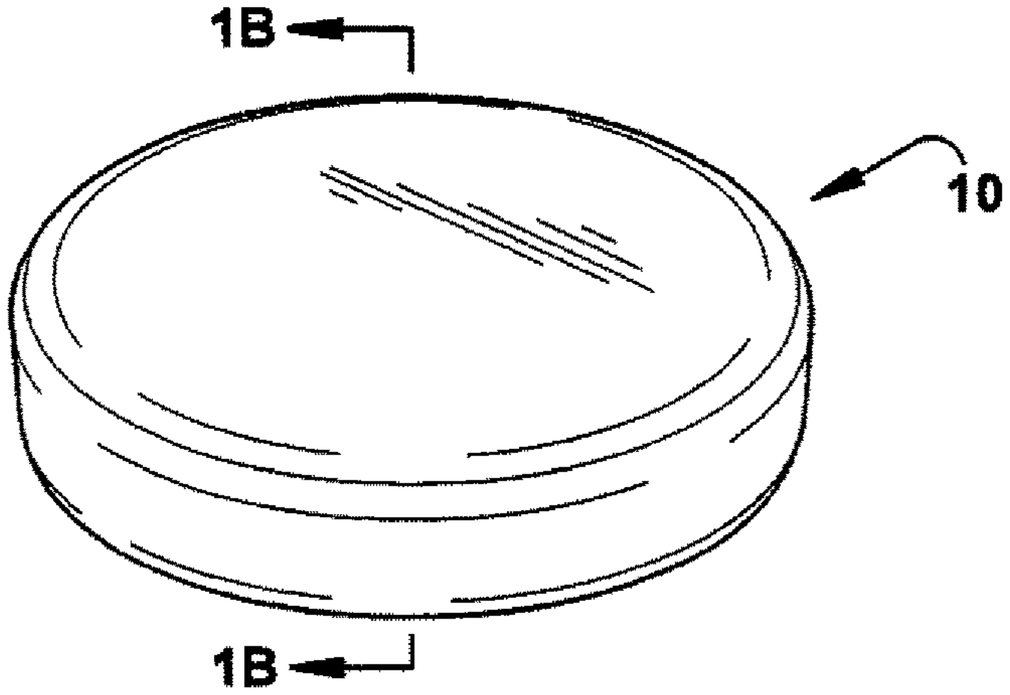


Fig. 1A

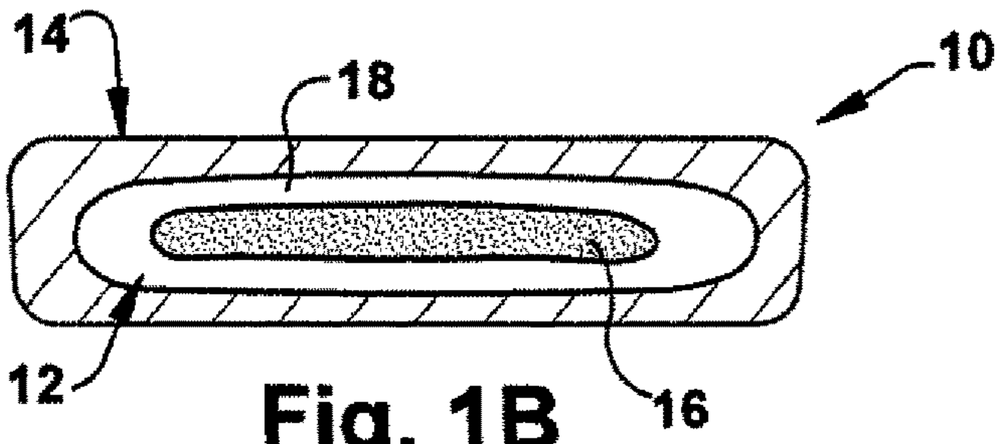


Fig. 1B

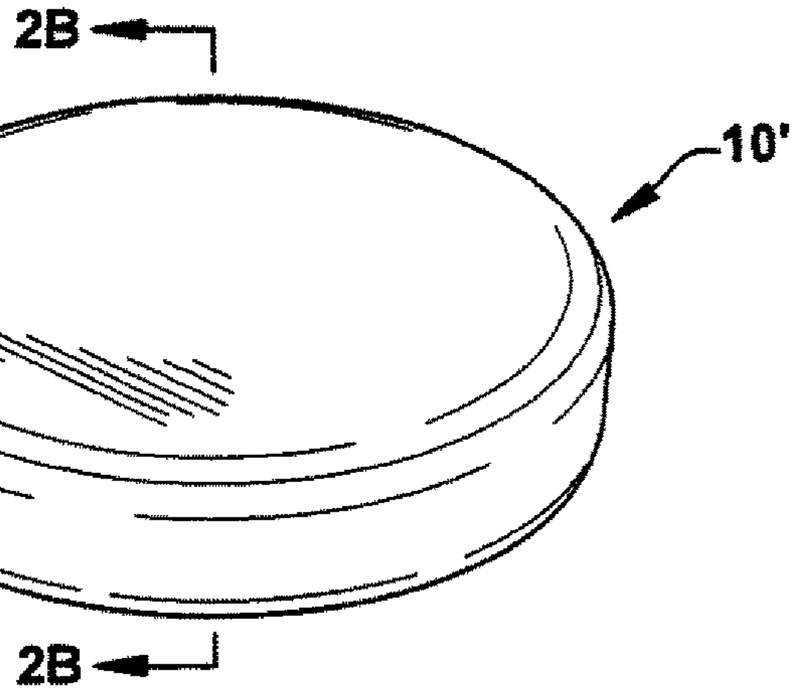


Fig. 2A

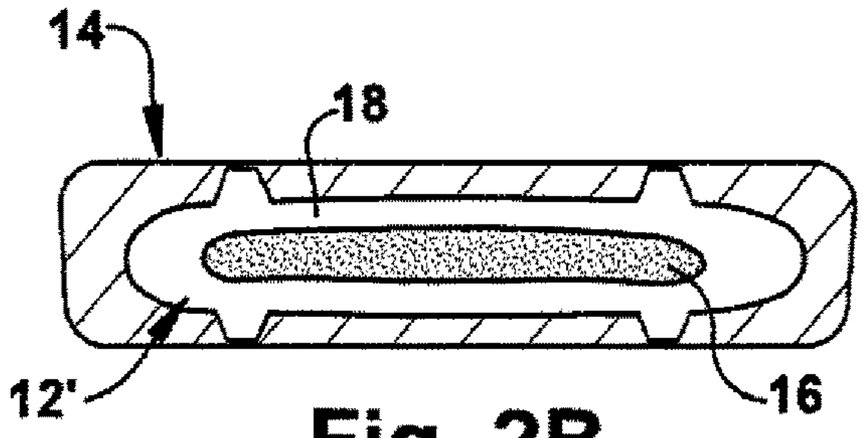


Fig. 2B

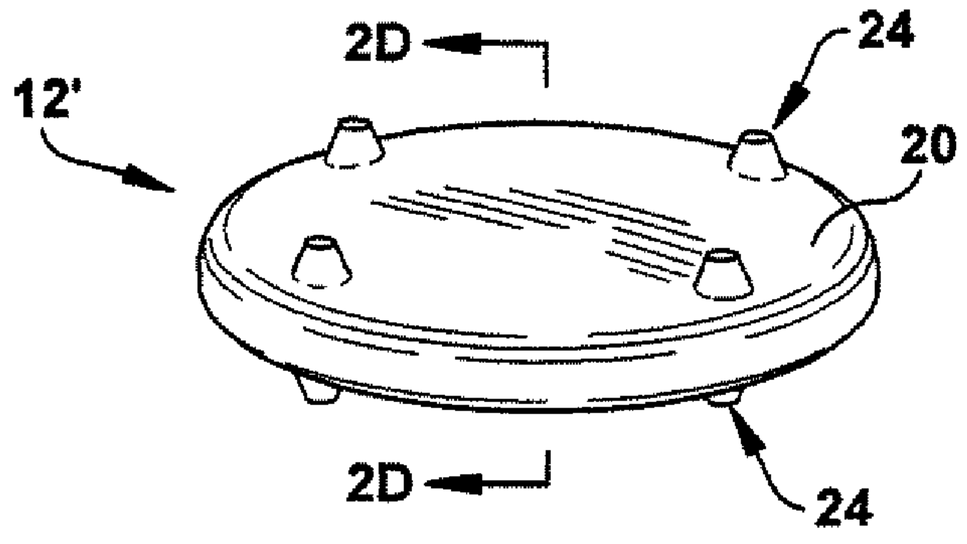


Fig. 2C

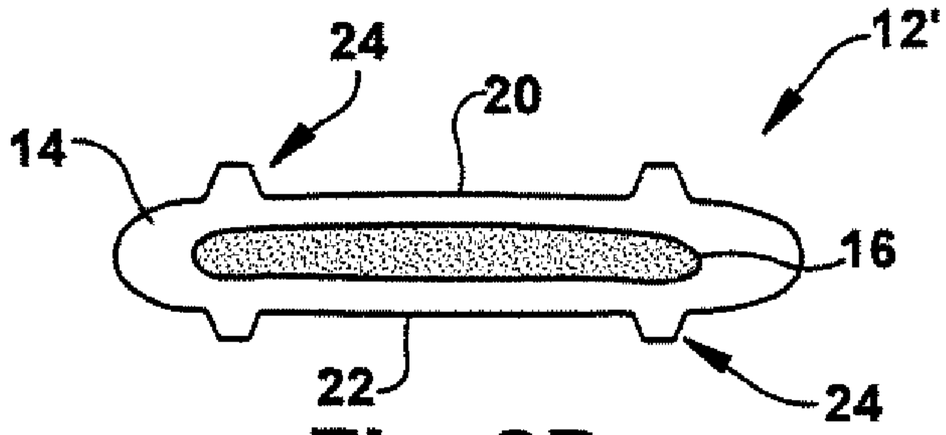


Fig. 2D

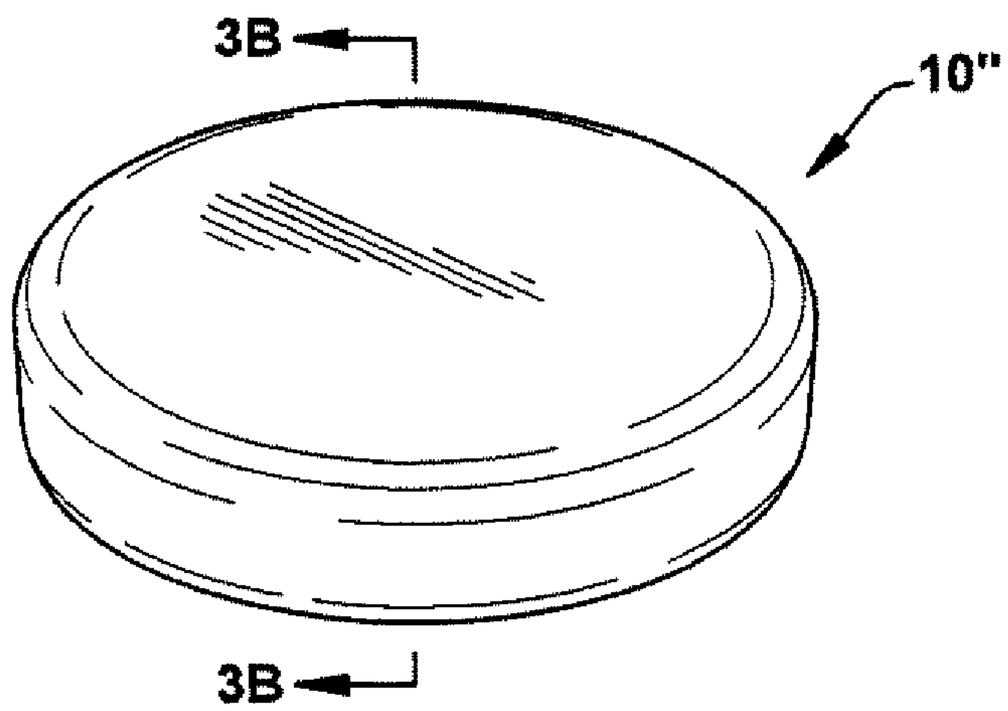


Fig. 3A

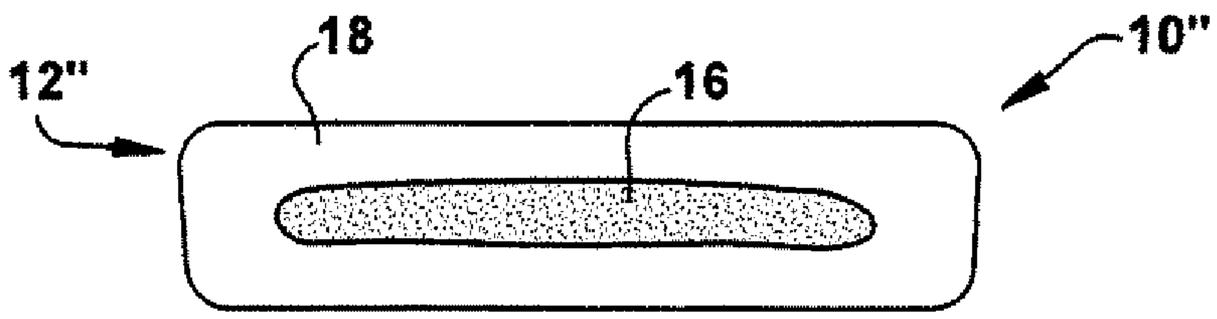


Fig. 3B

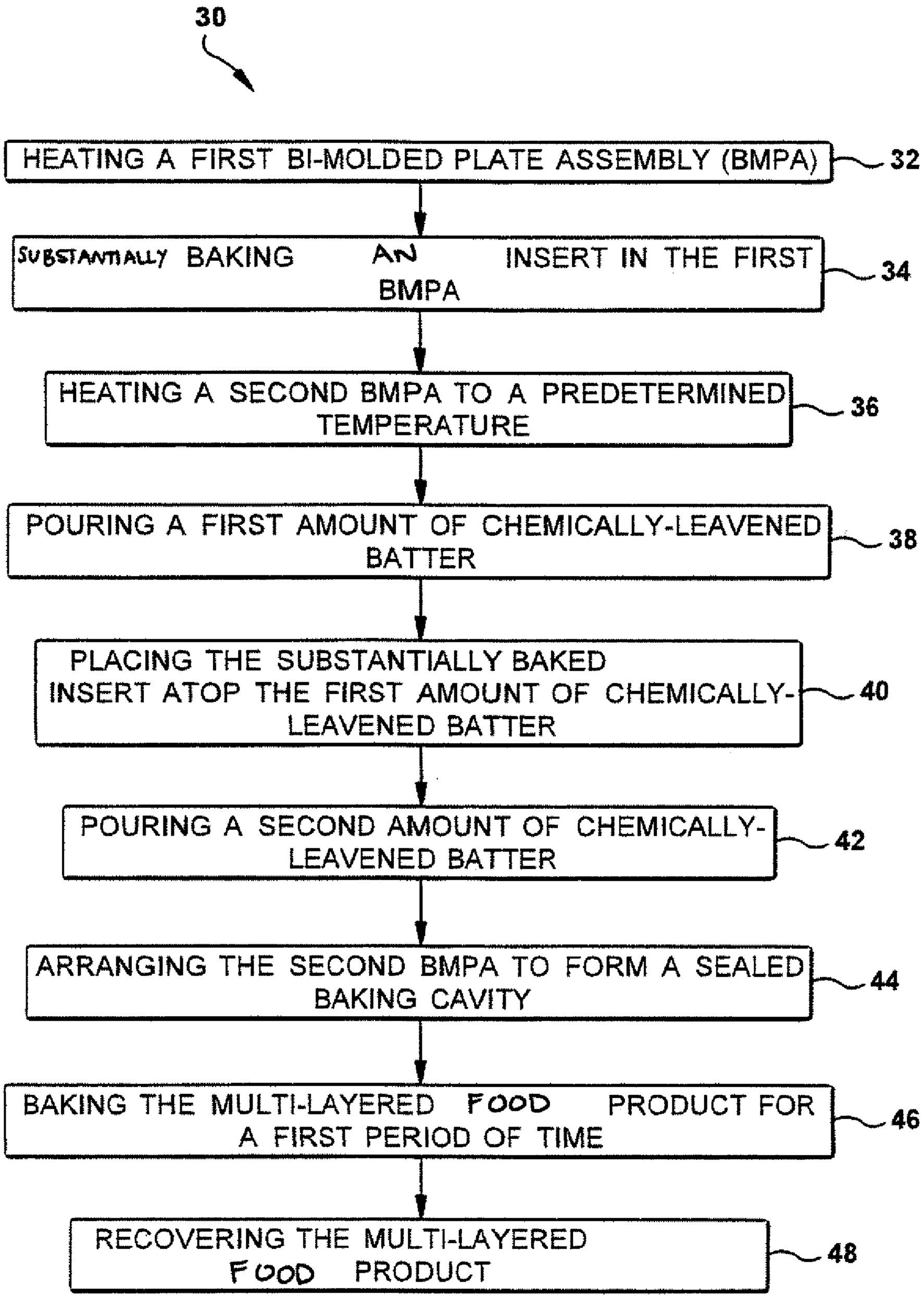

30
HEATING A FIRST BI-MOLDED PLATE ASSEMBLY (BMPA)
32
SUBSTANTIALLY BAKING AN INSERT IN THE FIRST BMPA
34
HEATING A SECOND BMPA TO A PREDETERMINED TEMPERATURE
36
POURING A FIRST AMOUNT OF CHEMICALLY-LEAVENED BATTER
38
PLACING THE SUBSTANTIALLY BAKED INSERT ATOP THE FIRST AMOUNT OF CHEMICALLY-LEAVENED BATTER
40
POURING A SECOND AMOUNT OF CHEMICALLY-LEAVENED BATTER
42
ARRANGING THE SECOND BMPA TO FORM A SEALED BAKING CAVITY
44
BAKING THE MULTI-LAYERED FOOD PRODUCT FOR A FIRST PERIOD OF TIME
46
RECOVERING THE MULTI-LAYERED FOOD PRODUCT
48

Fig. 4

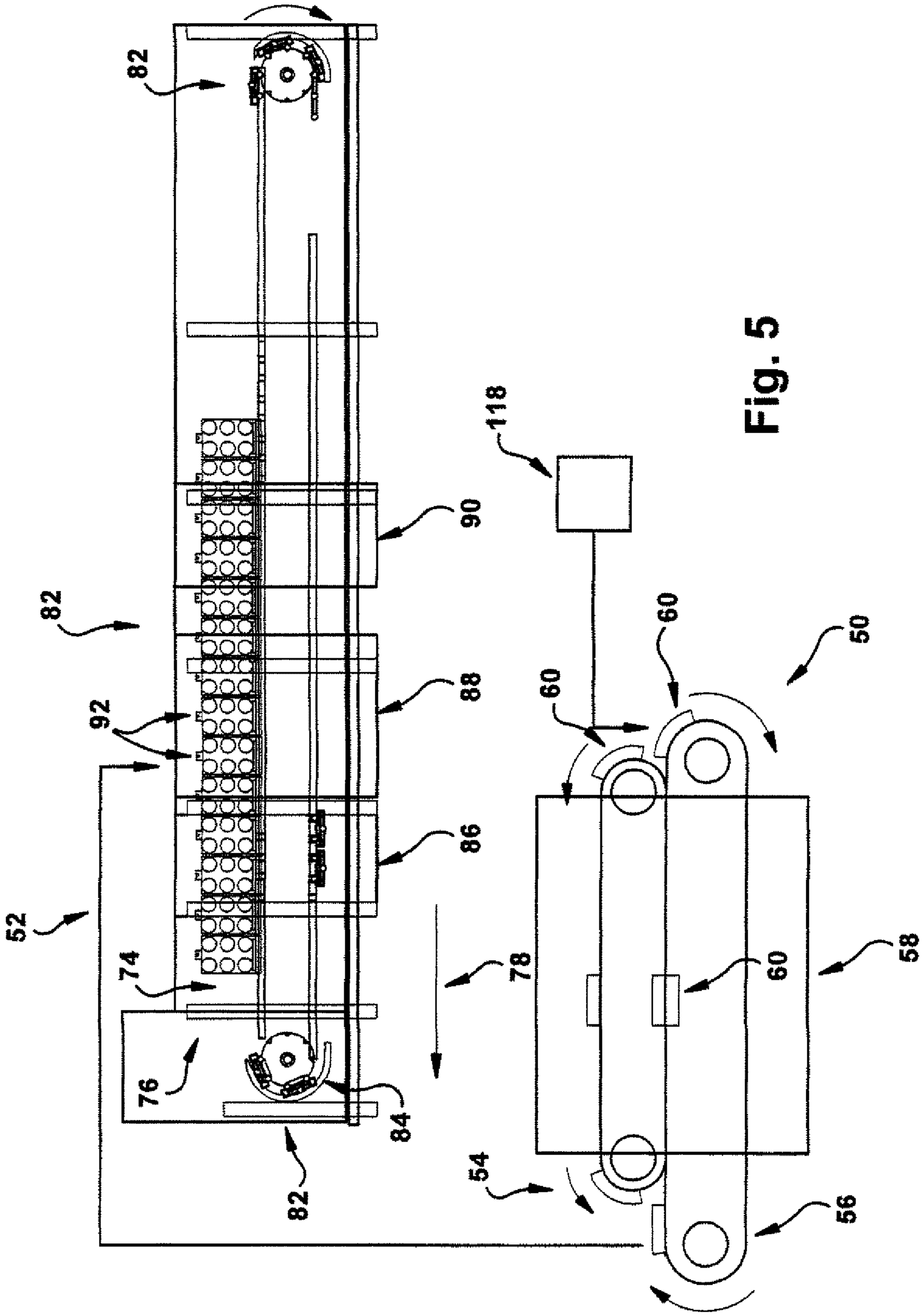


Fig. 5

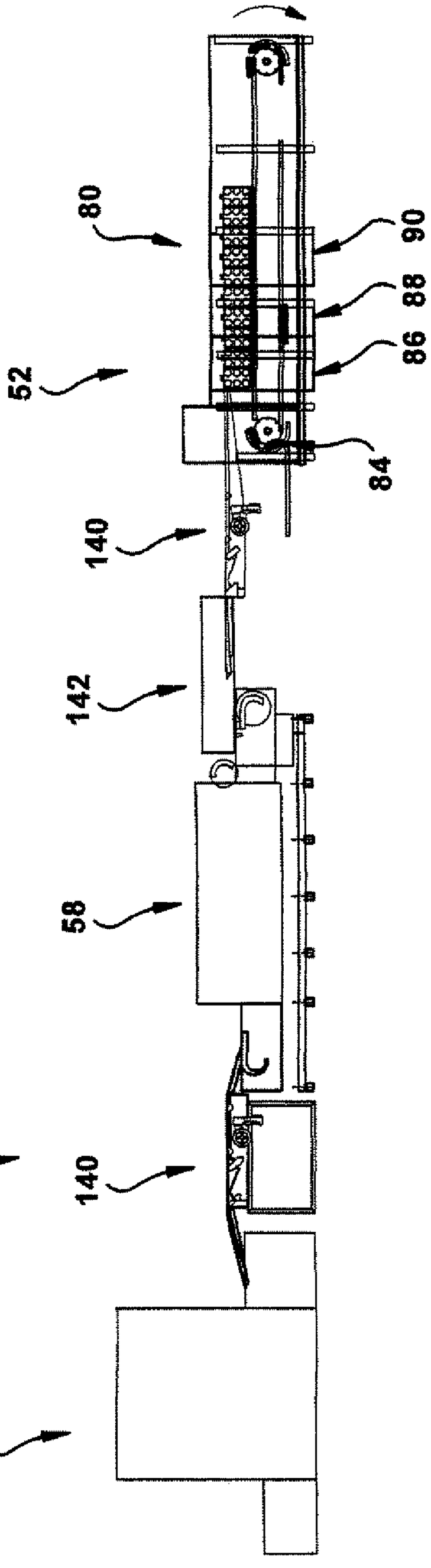


Fig. 6

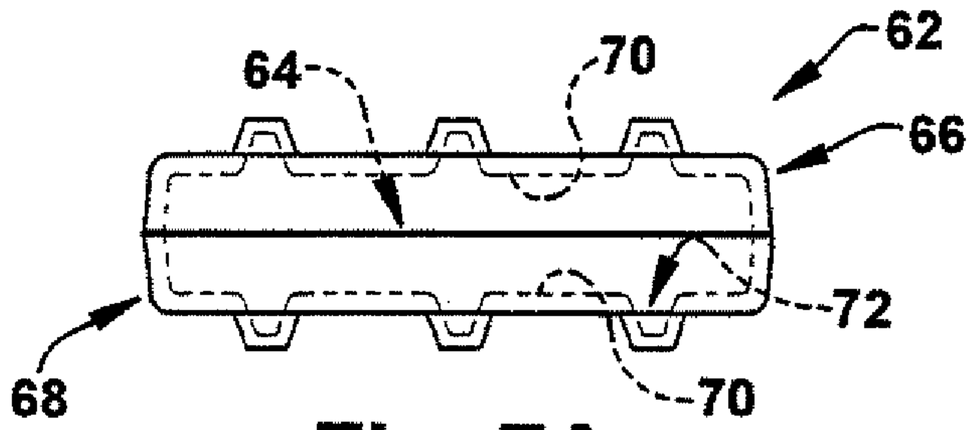


Fig. 7A

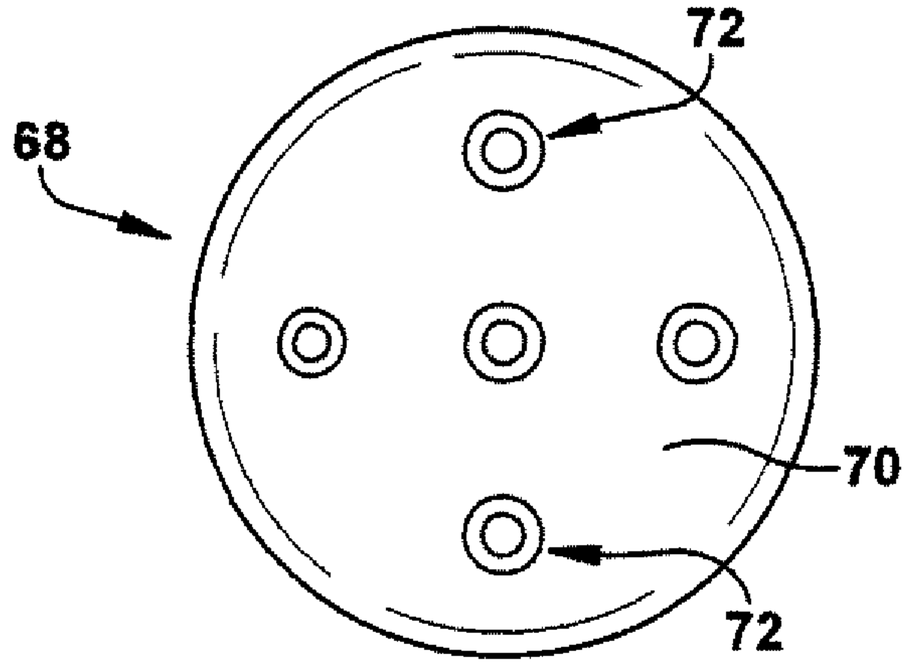


Fig. 7B

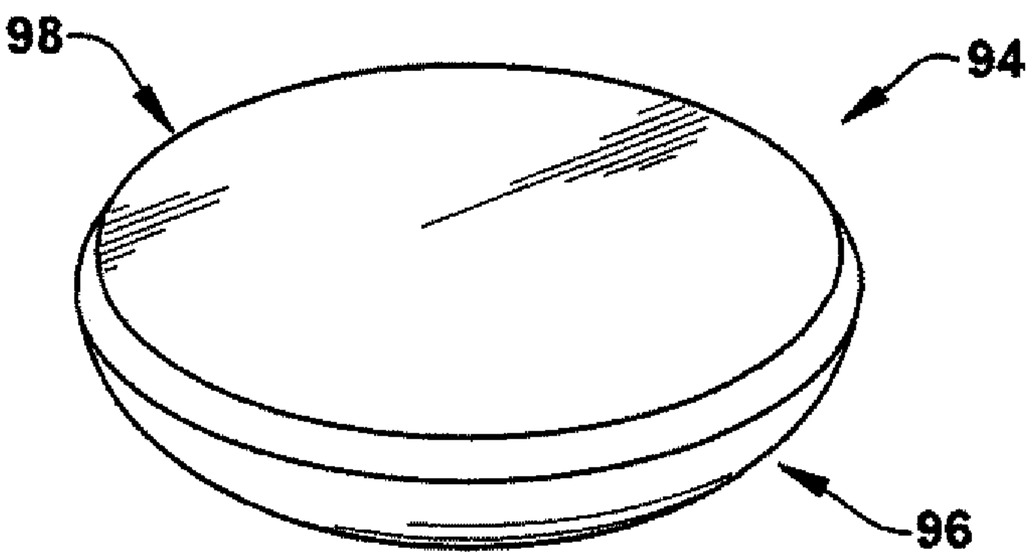


Fig. 8A

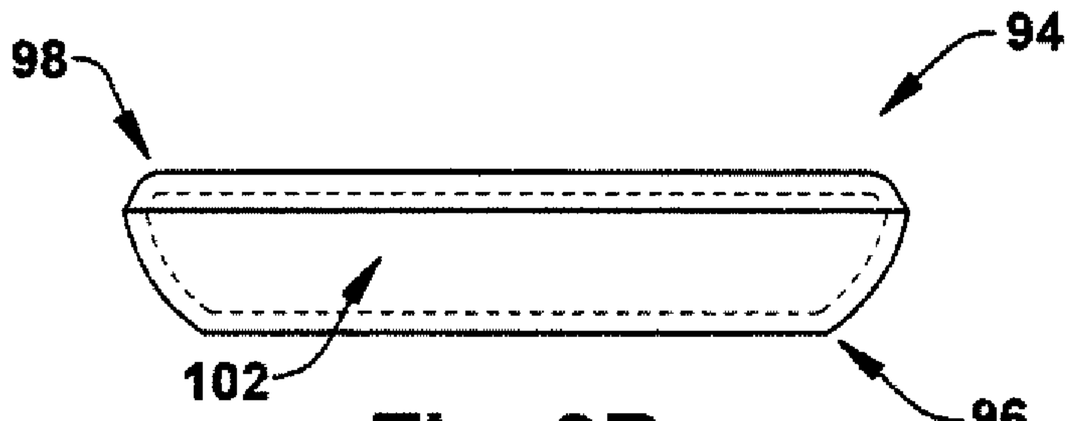


Fig. 8B

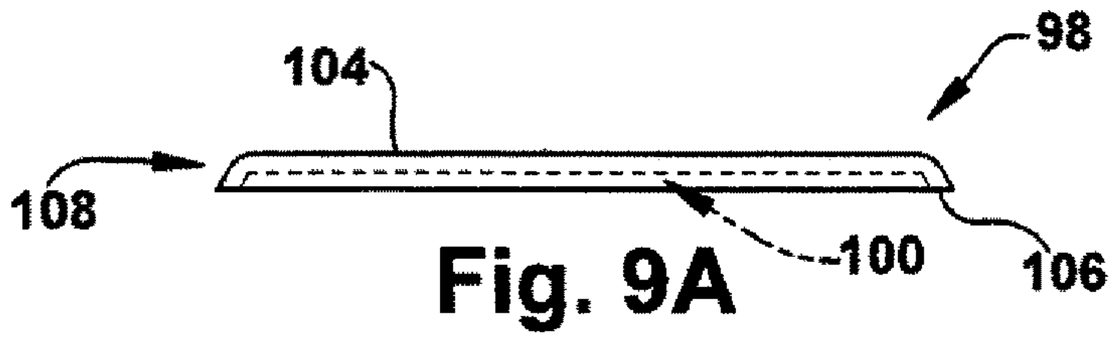


Fig. 9A

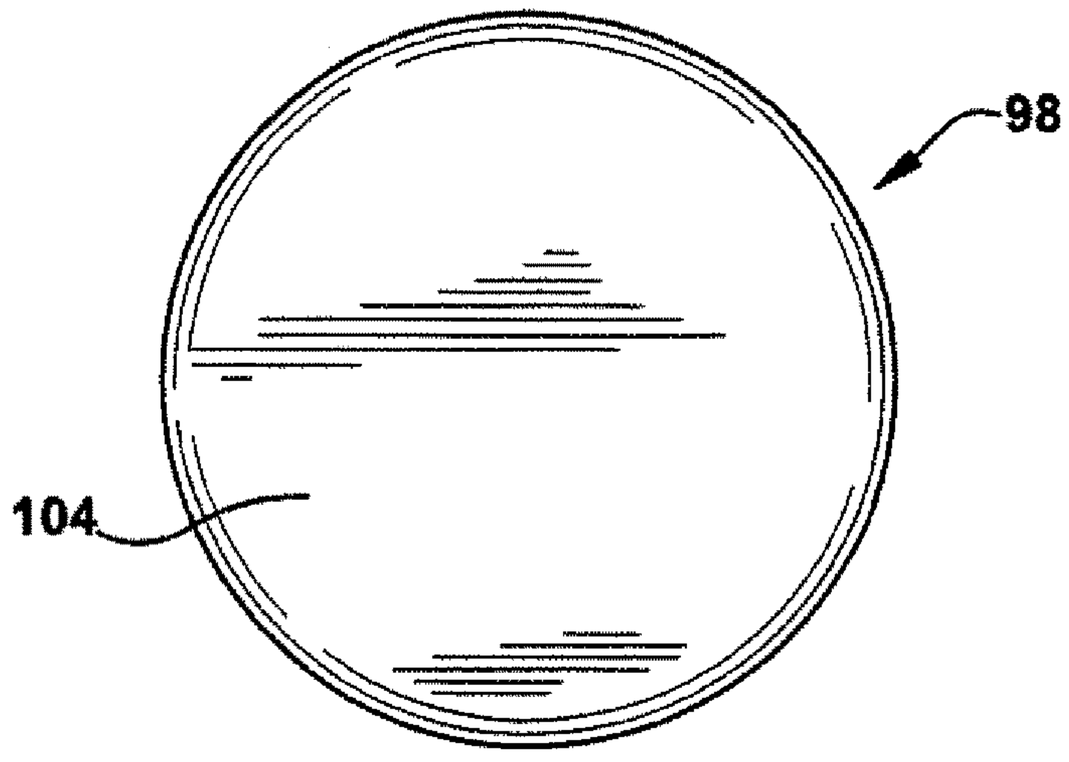


Fig. 9B

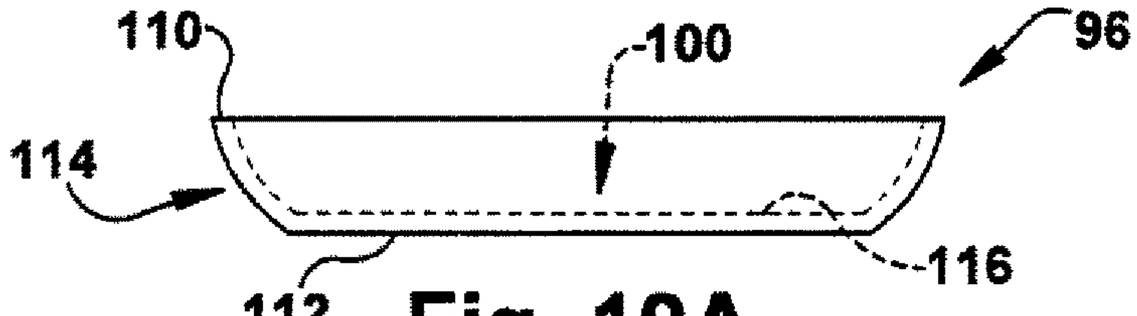


Fig. 10A

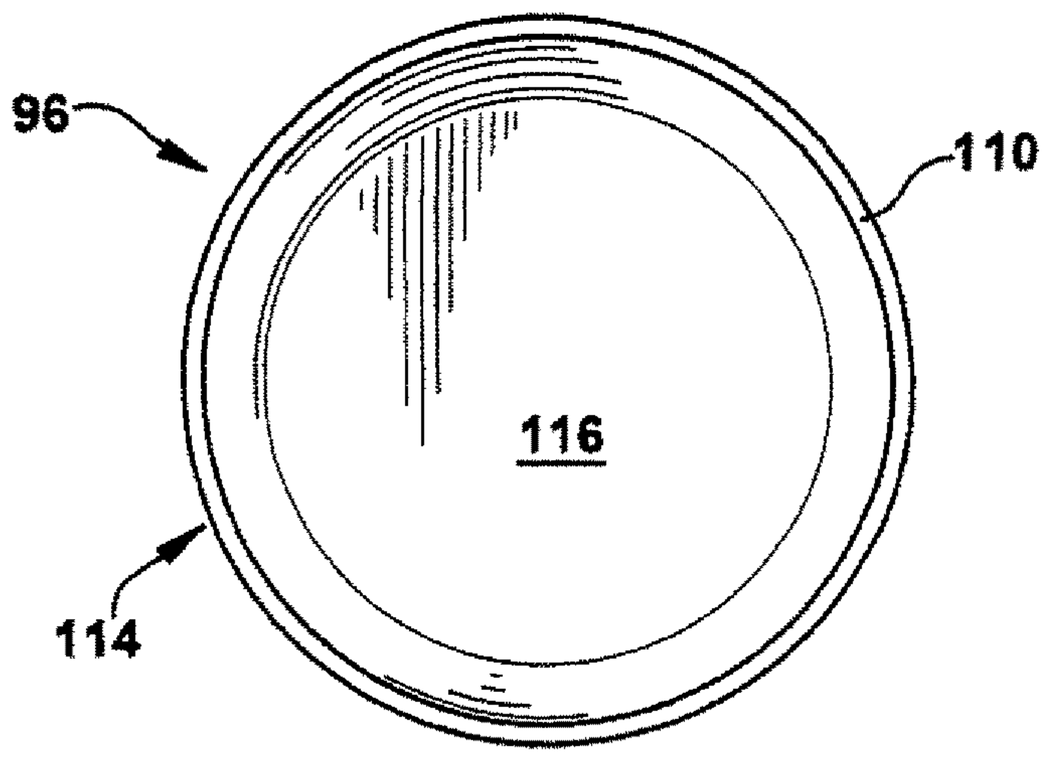


Fig. 10B

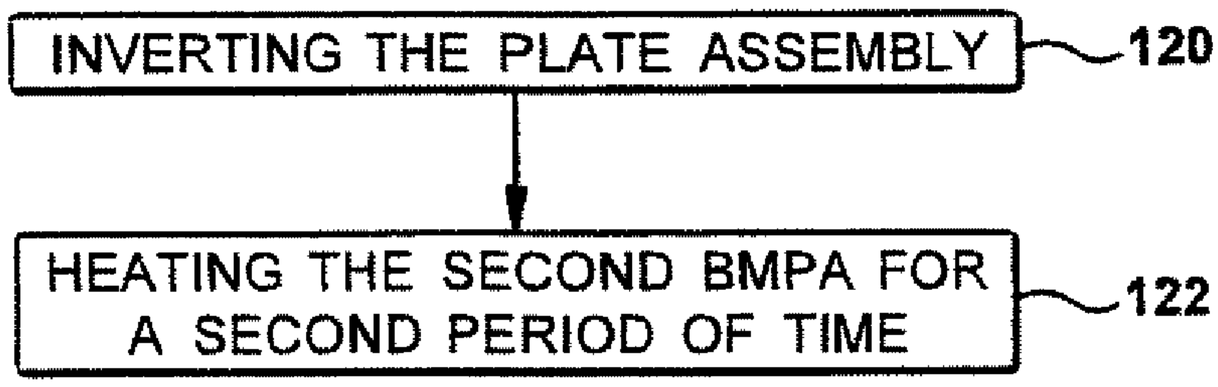

INVERTING THE PLATE ASSEMBLY
120
HEATING THE SECOND BMPA FOR A SECOND PERIOD OF TIME
122

Fig. 11

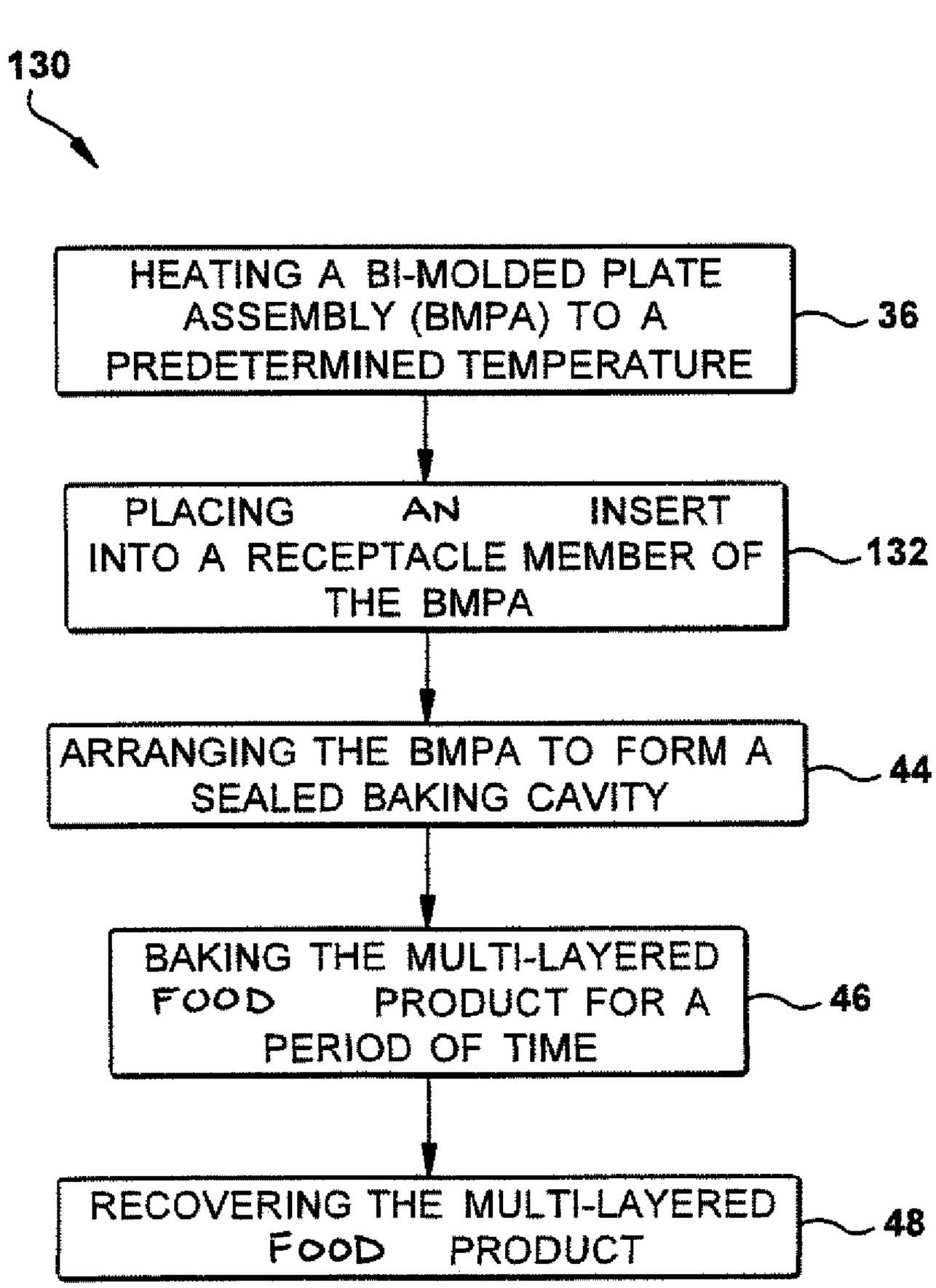

130
HEATING A BI-MOLDED PLATE ASSEMBLY (BMPA) TO A PREDETERMINED TEMPERATURE
36
PLACING AN INSERT INTO A RECEPTACLE MEMBER OF THE BMPA
132
ARRANGING THE BMPA TO FORM A SEALED BAKING CAVITY
44
BAKING THE MULTI-LAYERED FOOD PRODUCT FOR A PERIOD OF TIME
46
RECOVERING THE MULTI-LAYERED FOOD PRODUCT
48

Fig. 12

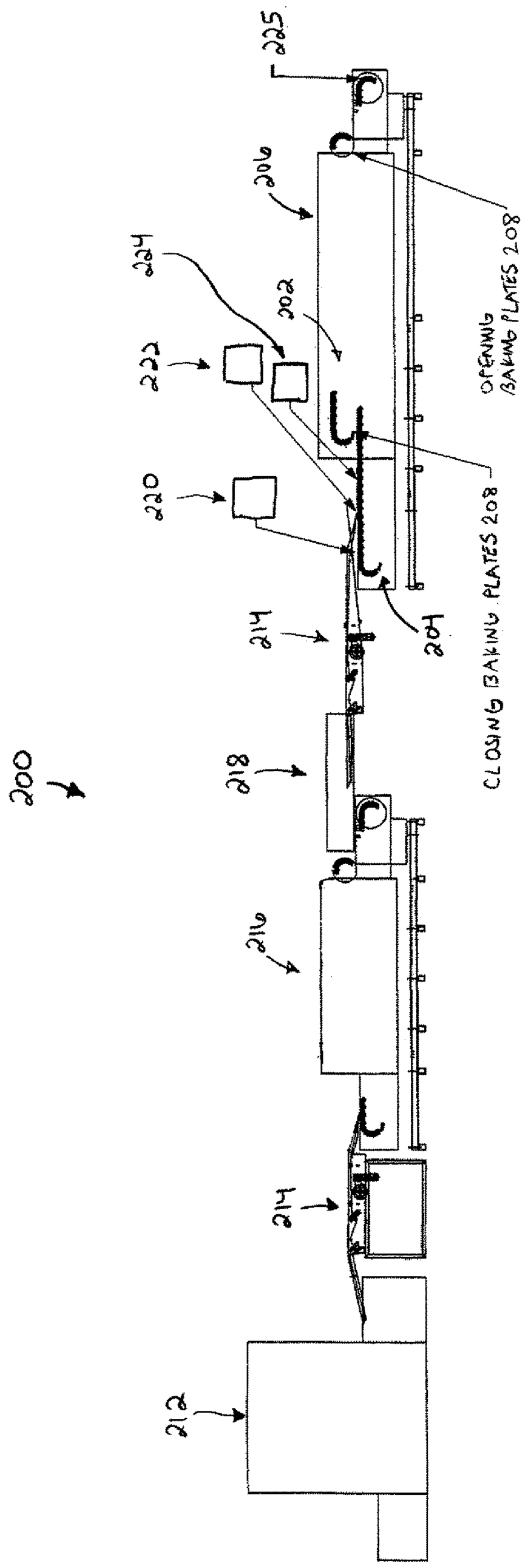

225
206
224
202
222
OPENING BAKING PLATES 208
220
CLOSING BAKING PLATES 208
204
214
218
216
212
200

Fig 13

MULTI-LAYERED FOOD PRODUCT AND METHOD FOR FORMING

RELATED APPLICATIONS

This application is a Division of U.S. patent application Ser. No. 13/419,505 filed Mar. 14, 2012, which is a Continuation-in-Part of U.S. patent application Ser. No. 12/958,313 filed Dec. 1, 2010, which claims priority from U.S. Provisional Application Ser. No. 61/265,457 filed Dec. 1, 2009. The entirety of each of the aforementioned applications is hereby incorporated by reference.

TECHNICAL FIELD

The claimed subject matter relates generally to filled food products, and more particularly to a multi-layered food product and method for forming the multi-layered food product.

BACKGROUND OF THE INVENTION

Demand for convenience food has steadily increased in recent years. As people look to find ways to maximize free time, ready-made meals and snack products have become increasingly popular with consumers. Most households now have a microwave oven to assist in the rapid heating of food. Accordingly, a large number of ready-made meals and snacks have been developed which can be heated in a microwave oven.

While these types of snacks and meals can be quickly heated in a microwave oven, the types of meals and snacks that are suitable for heating in such ovens are, to some extent, limited. For example, snacks of a type which have a filling surrounded by a crispy coating typically cannot be satisfactorily prepared in a microwave oven. This is because steam, generated during the heating process by evaporation of water from the filling, is deleterious to organoleptic qualities of the coating. Steam penetrates the outer coating rendering it moist, soggy and unappetizing. Such crispy-coated products are typically best prepared by heating in a conventional oven, or frying in oil to maintain crispness. This considerably lengthens the time required to prepare such snacks, thus making them far less convenient to prepare.

SUMMARY OF THE INVENTION

According to one aspect of the claimed subject matter, a multi-layered food product comprises a filling encapsulated by a substantially baked yeast-leavened dough. The encapsulated filling is further encapsulated by a substantially baked chemically-leavened batter layer.

According to another aspect of the claimed subject matter, a method is provided for forming a multi-layered food product. One act of the method includes substantially baking an insert in a first bi-molded plate assembly. The insert comprises a filling that is completely enveloped by a yeast-leavened dough. Next, the substantially baked insert is placed into a second bi-molded plate assembly so that the substantially baked insert is located atop a first amount of a chemically-leavened batter layer. A second amount of the chemically-leavened batter is then poured into the second bi-molded plate assembly so that the second amount of the chemically-leavened batter substantially or completely envelops the substantially baked insert. The second bi-molded plate assembly is heated for a time and at a temperature sufficient to bake the multi-layered food product.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and other features of the claimed subject matter will become apparent upon reading the following description with reference to the accompanying drawings, in which:

FIG. **1**A is a perspective view of a multi-layered food product in accordance with one aspect of the claimed subject matter;

FIG. **1**B is a cross-sectional view taken along Line **1**B-**1**B in FIG. **1**A;

FIG. **2**A is a perspective view of a multi-layered food product in accordance with another aspect of the claimed subject matter;

FIG. **2**B is a cross-sectional view taken along Line **2**B-**2**B in FIG. **2**A;

FIG. **2**C is a perspective view of a substantially baked insert comprising a portion of the multi-layered food product in FIGS. **2**A-B;

FIG. **2**D is a cross-sectional view taken along Line **2**D-**2**D in FIG. **2**C;

FIG. **3**A is a perspective view of a multi-layered food product in accordance with another aspect of the claimed subject matter;

FIG. **3**B is a cross-sectional view taken along Line **3**B-**3**B in FIG. **3**A;

FIG. **4** is a process flow diagram illustrating a method for forming a multi-layered food product according to another aspect of the claimed subject matter;

FIG. **5** is a schematic diagram showing an automated assembly line system used to form the multi-layered food product of the claimed subject matter;

FIG. **6** is a schematic diagram showing an alternative configuration of the automated assembly line system in FIG. **5**;

FIG. **7**A is a perspective view of a first bi-molded plate assembly for forming the substantially baked insert in FIGS. **2**A-D;

FIG. **7**B is a top view of a second baking plate of the first bi-molded plate assembly in FIG. **7**A;

FIG. **8**A is a perspective view of a second bi-molded plate assembly for forming the multi-layered food product in FIGS. **1**A-**2**D, the second bi-molded plate assembly comprising a lid member and a receptacle member;

FIG. **8**B is a side view of the second bi-molded plate assembly in FIG. **8**A;

FIG. **9**A is a side view of the lid member shown in FIG. **8**A;

FIG. **9**B is a top view of the lid member shown in FIG. **9**A;

FIG. **10**A is a side view of the receptacle member shown in FIG. **8**A;

FIG. **10**B is a top view of the receptacle member shown in FIG. **10**A;

FIG. **11** is a process flow diagram illustrating a further aspect of the method shown in FIG. **4**;

FIG. **12** is a process flow diagram illustrating a method for forming a multi-layered food product according to another aspect of the claimed subject matter; and

FIG. **13** is a schematic diagram showing an alternative configuration of the automated assembly line system in FIG. **6**.

DETAILED DESCRIPTION

The claimed subject matter relates generally to filled food products, and more particularly to a multi-layered food

product and method for forming the multi-layered food product. As representative of one aspect of the claimed subject matter, FIGS. **1**A-**2**D illustrates a multi-layered food product **10** or **10'** that combines the strength and functionality of yeast-leavened bread with the delicate eating quality of a quick bread or cake. Unlike conventional filled food products, the multi-layered food product **10** or **10'** of the claimed subject matter combines a yeast-leavened dough insert **12** or **12'**, which provides structural integrity to the product to facilitate eating by hand, with a chemically-leavened batter **14** that gives the product a soft and appealing eating quality, which is absent in purely yeast-leavened bread products. Additionally, the multi-layered food product **10** or **10'** can be initially warmed in a microwave and then reconstituted in an oven or toaster to yield a food product having a crispy exterior and a soft interior without the chewy or tough consistency of a typical yeast-leavened bread product.

The multi-layered food product **10** or **10'** has a molded configuration (e.g., puck-shaped) and a partially uniform color. Although a puck-shaped configuration is shown, the multi-layered food product **10** or **10'** can have other shapes, such as rectangular, circular, ovoid, square, triangular, cylindrical, star-shaped, or any other polygonal shape. The partially uniform color gives the multi-layered food product **10** or **10'** the appearance of a home-baked meal or snack that has been prepared on a griddle, pan or Panini. Although the multi-layered food product **10** or **10'** is shown as having a puck-shaped configuration, it will be appreciated that the product can have any desirable shape and size that makes the product versatile and easy to consume. For example, the multi-layered food product **10** or **10'** can have any shape and size that enables a consumer to easily eat the multi-layered food product at home or on-the-go without any mess. The molded configuration of the multi-layered food product **10** or **10'** also allows the product to be quickly and easily reconstituted for consumption in a microwave and/or toaster, or simply by oven.

As shown in FIG. **1**B, the multi-layered food product **10** comprises a substantially baked insert **12** or **12'** that includes a filling **16**, which is substantially (e.g., more than 50%, about 60%, about 70%, about 80% or about 90%) or completely enveloped or encapsulated by a yeast-leavened dough **18**. The substantially baked insert **12** or **12'** is substantially or completely enveloped or encapsulated by a chemically-leavened batter layer **14**. The substantially baked insert **12** or **12'** has a molded configuration (e.g., a puck-like shape). As noted above, the substantially baked insert **12** or **12'** additionally includes a filling **16** that is substantially or completely enveloped or encapsulated by the yeast-leavened dough **18**. The filling **16** can comprise any desired solid or semi-solid food product that is typically included as part of a meal or snack. Examples of fillings **16** can include fruit, cheese, eggs, meat (e.g., ham, bacon, sausage, hamburger, chicken, turkey, etc.), vegetables, sauces, and/or a combination thereof.

The multi-layered food product **10** or **10'** combines the distinctive structural and taste characteristics of yeast- and chemically-leavened breads into a single food product. Yeast-leavened breads use fermentation to create carbon dioxide "bubbles" and thereby leaven the dough. Fermentation begins by mixing the ingredients together to develop a strong gluten structure, which allows the dough to accumulate carbon dioxide. Leavening continues to occur in the proofing stage, in which a low heat and high humidity environment promotes optimal yeast fermentation. Yeast leavening is highly regarded as contributing desirable tastes and aromas to bread. For example, yeast-leavened breads tend to have a smooth outer crust and airy, flaky interiors.

Chemically-leavened breads, also known as "quick breads", are formed by the reaction of bicarbonate compounds with acid-reactive ingredients. Sodium bicarbonate is the most commonly used chemical leavening agent, but potassium and ammonium bicarbonates are also used. Chemical leavening typically occurs in two stages. The first stage releases carbon dioxide during mixing, while the second stage releases carbon dioxide during the baking process by the activation of certain chemical leavening ingredients. One advantage of chemical leavening is the quick formation of carbon dioxide bubbles within a dough or batter mixture, without the need for proofing. Unlike yeast-leavened breads, quick breads are known for having a slightly coarse texture and soft crusts.

The weight-percent (wt-%) of the chemically-leavened batter **14**, the filling **16**, and the yeast-leavened dough **18** can be varied to impart the multi-layered food product **10** or **10'** with desired structural and taste characteristics. In one example of the present invention, the wt-% of the filling **16** can be about 15% to about 60% of the total weight of the multi-layered food product **10** or **10'**, the wt-% of the yeast-leavened dough **18** can be about 10% to about 60% of the total weight of the multi-layered food product, and the wt-% of the chemically-leavened batter layer **14** can be about 15% to about 60% of the total weight of the multi-layered food product.

The leavening agents and/or other ingredients used to form the chemically-leavened batter layer **14** and the yeast-leavened dough **18** can also be varied depending upon the particular structural and taste characteristics of the multi-layered food product **10** or **10'**. For example, the wt-% of yeast to flour in the yeast-leavened dough **18** can be about 1% to about 6%. Additionally, one or a combination of chemical leavening agents (e.g., baking powder) can be used to form the chemically-leavened batter layer **14**. For example, the wt-% of the chemical leavening agent (e.g., baking powder) to flour in the chemically-leavened batter layer **14** can be about 0% to about 8%.

FIGS. **2**A-D illustrate a multi-layered food product **10'** according to another aspect of the claimed subject matter. The multi-layered food product **10'** can have a molded configuration (e.g., puck-shaped) and a partially uniform color. Although the multi-layered food product **10'** is shown as having a puck-shaped configuration, it will be appreciated that the product can have any desirable shape and size that makes the product versatile and easy to consume.

As shown in FIGS. **2**A-D, the substantially baked insert **12'** has a molded configuration and is defined by oppositely disposed first and second major surfaces **20** and **22**. At least one of the first and second major surfaces **20** and **22** can include a finger member **24** that projects outwardly from at least one of the first and second major surfaces. As shown in FIG. **2**C, for example, each of the first and second major surfaces **20** and **22** can include a plurality of finger members **24**. The finger members **24** generally serve to secure the substantially baked insert **12'** within the chemically-leavened batter layer **14** and prevent the insert from "sinking" to either side of the multi-layered food product **10'**. It should be appreciated that, where desired, the first and/or second major surfaces **20** and **22** may not include any finger members **24**.

The finger members **24** are formed from the yeast-leavened dough **18** and are dispersed about the first and second major surfaces **20** and **22**. The finger members **24** can be dimensioned (e.g., have a sufficient height, width, and thickness) to keep the substantially baked insert **12'** from

sinking to either side of the multi-layered food product **10'**. The finger members **24** may or may not be visible about the multi-layered food product **10'**. The finger members **24** can be symmetrically or asymmetrically dispersed about the first major surface **20** and/or the second major surface **22**. The finger members **24** can have any desired shape or configuration, such as the dome-shaped configuration shown in FIG. **2**C. Although not shown, it will be appreciated that one or more of the finger members **24** can alternatively have a ridge-like configuration that extends across all or only a portion of the first major surface **20** and/or the second major surface **22**.

FIGS. **3**A-B illustrate a multi-layered food product **10"** according to another aspect of the claimed subject matter. The multi-layered food product **10"** can have a molded configuration (e.g., puck-shaped) and a partially uniform color. Although the multi-layered food product **10"** is shown as having a puck-shaped configuration, it will be appreciated that the product can have any desirable shape and size that makes the product versatile and easy to consume. For example, the multi-layered food product **10"** can have any shape and size that enables a consumer to easily eat the multi-layered food product at home or on-the-go without any mess. The molded configuration of the multi-layered food product **10"** also allows the product to be quickly and easily reconstituted for consumption in a microwave and/or toaster, or simply an oven.

As shown in FIG. **3**B, the multi-layered food product **10"** can comprise a insert **12"** including a filling **16** that is substantially or completely enveloped or encapsulated by a yeast-leavened dough **18**. As described above, the filling **16** can include any desired solid or semi-solid food product that is typically included as part of a meal (e.g., fruit, cheese, eggs, meat, vegetables, sauces, and/or a combination thereof) or snack.

The weight-percent (wt-%) of the filling **16** and the yeast-leavened dough **18** can be varied to impart the multi-layered food product **10"** with desired structural and taste characteristics. In one example of the present invention, the wt-% of the filling **16** can be about 25% to about 75% of the total weight of the multi-layered food product **10"**, and the wt-% of the yeast-leavened dough **18** can be about 25% to about 75% of the total weight of the multi-layered food product.

As illustrated in FIGS. **4-6** and **13**, another aspect of the claimed subject matter includes a method **30** for forming a multi-layered food product **10** or **10'**. The method **30** can be performed using an automated assembly line system (FIGS. **5-6** and **13**) comprising first and second automated assembly lines **50** and **52** (and **206**). The first automated assembly line **50** is for preparing the substantially baked insert **12** or **12'** and comprises a series of upper and lower loop-shaped tracts **54** and **56**, a portion of each of which is disposed within an oven **58**. The upper and lower tracts **54** and **56** of the first automated assembly line **50** include a plurality of first baking plates **60** securely mounted thereto that can be securely mated together to form a plurality of first bi-molded plate assemblies **62** (FIGS. **7**A-B).

As shown in FIGS. **7**A-B, each of the first bi-molded plate assemblies **62** formed by each of the first baking plates **60** have a puck- or disc-shaped configuration and form a cavity **64** therebetween. The cavity **64** is defined by first and second plates **66** and **68**. The dimensions (e.g., height, width, length, cavity depth, etc.) of the first and second plates **66** and **68** can be about equal so that the dimensions of the substantially baked insert **12** or **12'** formed by the method **30** are also about equal. An inner surface **70** of each of the first and second plates **66** and **68** can include at least one depression **72** for forming the finger members **24**. For example, each of the depressions **72** can have a dome-shaped configuration for producing finger members **24** having a configuration as shown in FIGS. **2**A-D. It will be appreciated that the depressions **72** can have any configuration for forming finger members **24** with any corresponding desired configuration. All or only a portion of each of the first bi-molded plate assemblies **62** can be made of a rigid, heat-conductive material (e.g., a metal or metal alloy).

As shown in FIG. **5**, the second automated assembly line **52** is for preparing the multi-layered food product **10** or **10'** and comprises a continuous, loop-shaped tract **74** having an upper portion **76** and a lower portion **78**. A portion of the second assembly line **52** is seated within an oven **80**. The tract **74** of the second assembly line **52** is operably mated to opposing rotation members **82**, each of which is separately or jointly powered by a power source (not shown). As described in greater detail below, the second assembly line **52** also includes an automatic removing system **84**, a first batter injector **86**, an insert feeding system **88**, and a second batter injector **90**.

The second assembly line **52** also includes a plurality of second baking plates **92**, each of which includes at least one of a second bi-molded plate assembly **94** (FIGS. **8**A-B). As shown in FIG. **5**, the second assembly line **52** includes fourteen second baking plates **92** having six of the second bi-molded plate assemblies **94** in each. It will be appreciated that the number of the second baking plates **92**, as well as the number of the second bi-molded plate assemblies **94** comprising each of the second baking plates can be varied depending upon production needs and the configuration of the second assembly line **52**.

As shown in FIGS. **8**A-B, the second bi-molded plate assemblies **94** comprises a receptacle member **96** and a lid member **98**. All or only a portion of each of the second bi-molded plate assemblies **94** can be made of a rigid, heat-conductive material (e.g., a metal or metal alloy). The receptacle member **96** and the lid member **98** each have a generally circular or oval-shaped configuration and include a cavity **100** (FIGS. **9**A and **10**A). When the receptacle member **96** (FIG. **8**B) and the lid member **98** are securely mated with one another, the cavities **100** of the lid member and the receptacle member form a molded baking cavity **102**. The molded baking cavity **102** can have a diameter of about 6 cm to about 15 cm, and a depth of about 1 cm to about 5 cm.

The molded baking cavity **102** is designed to hold and bake the components of the multi-layered food product **10** or **10'** concurrently. Accordingly, the flavor of the multi-layered food product **10** or **10'** is enhanced through the process of baking the product components within the molded baking cavity **102**. In addition to the leavening power that the multi-layered food product **10** or **10'** receives from the yeast-leavened dough **18** and the chemically-leavened batter **14**, the multi-layered food product receives further leavening from the steam generated within the sealed molded baking cavity **102** during the baking process.

The lid member **98** (FIG. **9**A) of each of the second bi-molded plate assemblies **94** has a disc-like shape and is defined by oppositely disposed first and second major surfaces **104** and **106**. The first major surface **104** has a generally smooth, flat configuration that gradually tapers around the edge **108** towards the second major surface **106**. The second major surface **106** is adapted for mating with the receptacle member **96**. As shown in FIG. **9**A, the cavity **100** of the lid member **98** extends from the second major surface

106 towards the first major surface 104 such that the cavity is recessed within the second major surface. The cavity 100 of the lid member 98 defines a volume capable of holding between about 0% and about 40% of the multi-layered food product 10 or 10' during the baking process.

As shown in FIGS. 10A-B, the receptacle member 96 has a rounded, pan-shaped configuration. The receptacle member 96 includes oppositely disposed first and second major surfaces 110 and 112 and an annular side wall 114 that extends between the first and second major surfaces. The cavity 100 of the receptacle member 96 extends between the first major surface 110 and the bottom surface 116 of the receptacle member. The cavity 100 of the receptacle member 96 defines a volume that is greater than the volume of the lid member 98. The cavity 100 of the receptacle member 96 is capable of holding between about 60% and about 100% of the multi-layered food product 10 or 10' during the baking process.

It will be appreciated that one or more of the second bi-molded plate assemblies 94 can include an imprinting surface (not shown in detail) for imparting all or only a portion of a surface of the multi-layered food product 10 or 10' with a decorative design. For example, one or more surfaces defining the cavity 100 of the second bi-molded plate assembly 94 can include at least one depressed and/or raised imprinting surface having a decorative or aesthetically pleasing design. The imprinting surface may additionally or optionally serve to securely positioning the substantially baked insert 12 or 12' during baking. For example, the imprinting surface may assist in maintaining the substantially baked insert 12 or 12' proportionally in the center of the cavity 100 during baking.

At Act 32, the method 30 can begin by heating the first baking plates 60 to a predetermined temperature (e.g., about 250° F. to about 450 F.). Either prior to, contemporaneous with, or subsequent to Act 32, the raw components of the multi-layered food product 10 or 10' are prepared. For example, the yeast-leavened dough 18 can be formed by scaling (e.g., measuring out) the needed ingredients, which may include flour (e.g., about 27% to about 68% of the total batch weight), water (e.g., about 21% to about 57% of the total batch weight), milk powder (e.g., about 0% to about 9% of the total batch weight), eggs (e.g., about 2% to about 15% of the total batch weight), gluten (e.g., about 2% to about 5% of the total batch weight), sugar (e.g., about 2% to about 15% of the total batch weight), oil (e.g., about 0% to 15% of the total batch weight), yeast (e.g., about 1% to about 5% of the total batch weight), and salt (e.g., about 0.5% to about 2% of the total batch weight).

It will be appreciated that other ingredients may be added to adjust the flavor or improve the functionality of the yeast-leavened dough 18. Examples of ingredients that can be added to adjust the flavor of the yeast-leavened dough 18 can include butter, cheese, spices, natural flavorings, and fruit or nut inclusions. Examples of ingredients that may be added to improve the functionality of the yeast-leavened dough 18 can include baking enzymes, monoglycerides, fats and oils. After the ingredients are scaled, the ingredients are then mixed and kneaded together for a period of time sufficient to develop the gluten structure of the yeast-leavened dough 18. The fully developed, yeast-leavened dough 18 is then ready for subsequent use.

After preparing the yeast-leavened dough 18, a measured amount of one or more fillings 16 is "encrusted" inside a measured amount of the yeast-leavened dough to form the insert 12 or 12'. The measured amount of filling 16 may range from about 15 grams to about 99 grams, and the measured amount of the yeast-leavened dough 18 may range from 12 grams to about 128 grams. After the filling 16 is encrusted inside the yeast-leavened dough 18, the formed product comprises a ball-shaped insert 12 or 12' that is substantially or completely enveloped by the yeast-leavened dough and includes the filling at its center.

The insert 12 or 12' can be passed through a molding or shaping device (not shown) so that upper and/or lower portions of the insert are partially flattened. The molded insert 12 or 12' is placed into a bakery proofing chamber 118 (FIG. 5) for a period of time sufficient to adequately "rise" or "proof" the insert prior to baking. For example, the proofing time can vary from about 10 minutes to about 60 minutes, depending upon the type and size of the yeast-leavened dough 18 and the filling 16. After the insert 12 or 12' is adequately proofed, it is ready for subsequent use.

Either before, during, or after formation of the insert 12 or 12', the chemically-leavened batter layer 14 is prepared. Creation of the chemically-leavened batter layer 14 begins by scaling the necessary ingredients, which may include water (e.g., about 29% to about 68% of the total batch weight), flour (e.g., about 15% to about 40% of the total batch weight), eggs (e.g., about 5% to about 30% of the total batch weight), sugar (e.g., about 0% to about 17% of the total batch weight), milk powder (e.g., about 0% to about 12% of the total batch weight), oil (e.g., about 0% to about 15% of the total batch weight), baking powder (e.g., about 0.5% to about 5% of the total batch weight), baking soda (e.g., about 0% to about 2% of the total batch weight), and salt (e.g., about 0.5% to about 3% of the total batch weight).

It will be appreciated that other ingredients may be added to adjust the flavor or improve the functionality of the chemically-leavened batter layer 14. Examples of ingredients that may be added to adjust the flavor of the chemically-leavened batter layer 14 may include butter, cheese, meat, natural flavors or spices, fruits, nuts, and the like. Examples of ingredients that may be added to improve the functionality of the chemically-leavened batter layer 14 may include oils, fats, emulsifiers, and the like.

After scaling the desired ingredients, the ingredients are then thoroughly mixed until they are adequately combined into a partially liquid form, typically in a large temperature-controlled stirring vat (not shown). The mixed ingredients may then be transferred to a second batter mixer (not shown) where additional ingredients can be added (e.g., eggs), stirred at high speeds, and properly aerated. The resultant chemically-leavened batter layer 14 may then be placed inside a temperature-controlled container (e.g., first and second batter injectors 86 and 90) that will be used to deposit the chemically-leavened batter during the baking process.

Prior to, simultaneous with, or subsequent to preparation of the insert 12 or 12' and the chemically-leavened batter 14, the insert can be substantially baked at Act 34. As shown in FIG. 5, an insert 12 is taken from the proofing chamber 118 and deposited into a first baking plate 60 (e.g., the second plate 68 of a first bi-molded plate assembly 62). It will be appreciated that the insert 12 or 12' can be deposited into the first baking plate 60 by any one or combination of suitable mechanisms, such as via a robotic arm, conveyor belt system 140 (FIG. 6), or by hand. Once the insert 12 or 12' is deposited into the first baking plate 60, the baking plate rotates about the lower tract to securely mate with another baking plate, thereby forming a plurality of first bi-molded plate assemblies 62.

The baking plates 60 then move through an oven 58 (e.g., a tunnel oven) for a time and at a temperature sufficient to substantially bake the insert 12 or 12'. In some instances, the

term "substantially baked" can mean that the insert **12** or **12'** is baked about 80%, about 85%, about 90%, about 95% or 100% (completely baked). In other instances, the term "substantially baked" can mean par baked. In one example, par baked can mean baked less than 100% at a first time, and then subsequently completely baked at a different second time. In further instances, the term "substantially baked" can mean baked less than 100%, but more than 80%. For example, the first baking plates **60** can move through oven **58** so that the insert **12** or **12'** is completely or 100% baked and, thus, free from liquid or moisture. For instance, the first baking plates **60** can move through oven **58** for a time of about 20 seconds to about 90 seconds and at a temperature of about 250° F. to about 450° F. to substantially or completely bake the insert **12** or **12'**.

After the first baking plates **60** pass through the oven **58**, the baking plates are separated as shown in FIG. **5** so that the substantially baked insert **12** or **12'** can be removed from the plates and deposited into the insert feeding system **88**. It will be appreciated that the substantially baked insert **12** or **12'** produced by the method **30** can be deposited into the insert feeding system **88** by any one or combination of mechanisms, such as a transfer machine **142** (FIG. **6**) that removes the substantially baked insert **12** or **12'** from the first baking plates **60** and then passes the insert onto a conveyor belt system **140**. Prior to depositing the substantially baked insert **12** or **12'** into the insert feeding system **88**, the second baking plates **92** (and thus each of the second bi-molded plate assemblies **94**) are heated to a predetermined temperature (e.g., about 300° F. to about 450° F.) at Act **36**. Upon heating each of the second bi-molded plate assemblies **94** to the predetermined temperature and forming the components of the multi-layered food product **10** or **10'**, the second assembly line **52** is activated so that the tract **74** progressively moves in a clock-wise motion at a predetermined rate.

At Act **38**, the first batter injector **86** is operated to pour a first amount of the chemically-leavened batter layer **14** into the cavity **100** of each of the receptacle members **96**. The first amount of the chemically-leavened batter layer **14** is delivered in an amount sufficient to cover at least a substantial portion of the bottom surface **116** of each of the receptacle members **96**. The total amount of the chemically-leavened batter layer **14** that is poured into the receptacle members **96** can vary between about 10 grams and about 128 grams, depending upon the type of multi-layered food product **10** or **10'** being made. It will be appreciated that a pan release agent (e.g., baking oil) can be applied to all or only a portion of the molded baking cavity **102** prior to the addition of the raw components to prevent or mitigate sticking.

At Act **40**, the second baking plates **92** are advanced along the second assembly line **52** to the insert feeding system **88**. The insert system **88** is then activated to place a substantially baked insert **12** or **12'** atop the first amount of the chemically-leavened batter layer **14** already in each of the receptacle members **96**. The substantially baked insert **12** or **12'** is placed atop the first amount of the chemically-leavened batter layer **14** so that no portion of the insert comes into contact with each of the receptacle members **96**. In other words, a substantially baked insert **12** or **12'** is placed in each of the receptacle members **96** so that each insert is at least partially enveloped or encapsulated by the first amount of the chemically-leavened batter layer **14**. The volume of each of the receptacle members **96** filled by the first amount of the chemically-leavened batter layer **14** and the substantially baked insert **12** or **12'** can be from about 35% to about 75%.

As the second baking plates **92** continue to advance along the second assembly line **52**, the second batter injector **90** is operated to pour a second amount of the chemically-leavened batter layer **14** into each of the receptacle members **96** (Act **42**). The second amount of the chemically-leavened batter layer **14** is delivered in an amount sufficient to fill an additional 20% to about 65% of the cavity **100** of each of the receptacle members **96**. Importantly, the second amount of the chemically-leavened batter layer **14** is poured into each of the receptacle members **96** such that each of the substantially baked inserts **12** or **12'** is substantially or completely enveloped by the chemically-leavened batter layer.

At Act **44**, each of the second bi-molded plate assemblies **94** is arranged to form the molded baking cavity **102**. For example, the second major surface **106** of each of the lid members **98** is securely mated with the first major surface **110** of each of the receptacle members **96** to form a heated and sealed molded baking cavity **102**. By "sealed" it is understood that the baking cavity **102** can include holes, vents, or other apertures that permit the release of steam from the baking cavity while preventing leakage of product components. It will be appreciated that Acts **36-44** of the method **30** plus a first baking period are conducted during a first period of time (Act **46**), which is about 10% to about 40% of the total time required to bake the multi-layered food product **10** or **10'**.

After assembling the molded baking cavities **102** and then baking for the first period of time, the second baking plates **92** are rotated about the rotation members **82** (indicated by arrows) so that the second bi-molded plate assemblies **94** is inverted (Act **120**) (FIG. **11**). Inverting the second bi-molded plate assemblies **94** allows the chemically-leavened batter layer **14** to distribute better within each of the molded baking cavities **102**, while also facilitating more even baking throughout the multi-layered food product **10** or **10'**. After inverting the second baking plates **92**, the second baking plates are heated for a second period of time, which is greater than the first period of time (Act **122**). For example, the second period of time can be about 60% to about 90% of the total time needed to bake the multi-layered food product **10** or **10'**. By baking components (e.g., all of the components) of the multi-layered food product **10** under pressure and at a uniform temperature, the yeast-leavened dough **18** and the chemically-leavened batter layer **14** can be combined to form a substantially seamless, borderless product.

At Act **48** (FIG. **4**), the automatic removing system **84** separates the lid member **98** and the receptacle member **96** of each of the second bi-molded plate assemblies **94** after the multi-layered food product **10** or **10'** has been sufficiently baked. Since each of the receptacle members **96** is inverted, separation of the lid members **98** from the receptacle members allows the multi-layered food product **10** or **10'** to be easily removed from the second bi-molded plate assemblies **94** via gravity. Alternatively, the multi-layer food product **10** or **10'** can be removed by a suction mechanism (not shown) once the bi-molded plate assemblies **94** have rotated back around the rotation members **82** and the lid members **98** have opened. After removing the multi-layered food product **10** or **10'** from each of the bi-molded plate assemblies **94**, the multi-layered food product is cooled for an appropriate period of time before freezing, wrapping and packaging. The packaged, multi-layered food product **10** or **10'** can be boxed and further frozen ahead of distribution to the marketplace.

As illustrated in FIG. **12**, another aspect of the claimed subject matter includes a method **130** for forming a multi-layered food product **10"**. The method **130** is similar to the

method **30** illustrated in FIG. **4**. For example, the method **130** can be performed using an automated assembly line that is identical or similar to the first automated assembly line **50** described above. Additionally, the method **130** can be performed using bi-molded plate assemblies (not shown) that are similar to the first bi-molded plate assemblies **62** described above. For example, each of the receptacle members comprising the bi-molded plate assemblies can have a volume that is about the same as the volume of the lid members.

At Act **36**, the method **130** can begin by heating the bi-molded plate assemblies to a predetermined temperature (e.g., about 300° F. to about 450° F.). Either prior to, contemporaneous with, or subsequent to Act **36**, the raw components of the multi-layered food product **10"** can be prepared. For example, the yeast-leavened dough **18** can be formed by scaling (e.g., measuring out) the needed ingredients (as described above). As also described above, it will be appreciated that other ingredients may be added to adjust the flavor or improve the functionality of the yeast-leavened dough **18**.

After the ingredients are scaled, the ingredients can then be mixed and kneaded together for a period of time sufficient to develop the gluten structure of the yeast-leavened dough **18**. Next, a measured amount of one or more fillings **16** can be "encrusted" inside a measured amount of the yeast-leavened dough **18** using a known bakery machining process. The measured amount of filling **16** may range from about 15 grams to about 99 grams, and the measured amount of the yeast-leavened dough **18** may range from 12 grams to about 128 grams. After the filling **16** is encrusted inside the yeast-leavened dough **18**, the formed product comprises a ball-shaped insert **12"** that is completely enveloped or encapsulated by the yeast-leavened dough and includes the filling at its center.

The insert **12"** can be passed through a molding or shaping device (not shown) so that upper and lower portions of the insert are partially flattened. The molded insert **12"** is then placed into a bakery proofing chamber **118** for a period of time sufficient to adequately "rise" or "proof" the insert prior to baking. For example, the proofing time can vary from about 10 minutes to about 60 minutes, depending upon the type and size of the yeast-leavened dough **18** and the filling **16**. After the insert **12"** is adequately proofed, it is ready for subsequent use.

Upon heating each of the bi-molded plate assemblies to the predetermined temperature and forming the raw components of the multi-layered food product **10"**, the insert **12"** can be placed into a receptacle member of a bi-molded plate assembly (Act **132**) and the lid member mated with the receptacle member to form a sealed baking cavity (Act **44**).

Following formation of the sealed baking cavity, the insert **12"** can be entirely baked at Act **46**. As described above, an insert **12"** is taken from the proofing chamber **118** and deposited into the receptacle member of a bi-molded plate assembly. It will be appreciated that the insert **12"** can be deposited into the receptacle member by any one or combination of mechanisms known in the art, such as via a robotic arm, conveyor belt system **140** (FIG. **6**), or by hand. Once the insert **12"** is deposited into the receptacle member, the receptacle members and the lid members rotate about the tracts of an oven **58** (e.g., a tunnel oven) to securely mate with another and thereby form a plurality of bi-molded plate assemblies.

The bi-molded plate assemblies then move through the oven **58** for a time and at a temperature sufficient to completely bake the insert **12"**. For example, the bi-molded plate assemblies can move through oven **58** so that the insert **12"** is baked to completion (100% baked). For instance, the first bi-molded plate assemblies can move through the oven **58** for a time of about 1 minute to about 4 minutes and at a temperature of about 300° F. to about 450° F. to completely bake the insert **12"**.

After the bi-molded plate assemblies pass through the oven **58**, the receptacle members and the lid members are separated as shown in FIG. **5** so that the multi-layered food product **10"** can be removed from the plates and cooled for an appropriate period of time before freezing, wrapping and packaging. The packaged, multi-layered food product **10"** can be boxed and further frozen ahead of distribution to the marketplace.

It will be appreciated that the claimed subject matter can include an alternative assembly line system **200** (FIG. **13**) for forming a multi-layered food product **10** or **10'**. As shown in FIG. **13**, the assembly line system **200** includes a series of upper and lower loop-shaped tracts **202** and **204**, a portion of each of which is disposed within an oven **206**. The upper and lower tracts **202** and **204** include a plurality of baking plates **208** (not shown in detail) securely mounted thereto that can be mated together to form a plurality of bi-molded plate assemblies (not shown) (as described above). The lower tract **204** has a greater length than the upper tract **202**, which allows the components of the multi-layered food product **10** or **10'** to be supplied to the baking plates **208** as shown in FIG. **13**. Other components of the assembly line system **200** are similar or identical to those shown in FIG. **6** and described above, such as a bakery proofing chamber **212**, a conveyor belt system **214**, a second oven **216**, a transfer machine **218**, a first batter injector **220**, an insert feeding system **222**, a second batter injector **224**, and an optional automatic removing system **225**. For example, the oven **206** is different than the oven **52** described above because there is no inversion or flipping of plates during operation.

In operation, the baking plates are heated to a predetermined temperature (as described above). The first batter injector **220** is operated to pour a first amount of a chemically-leavened batter layer **14** into each of the baking plates **208**. The baking plates **208** are then advanced along the lower tract **204** (e.g., clockwise) to the insert feeding system **222**, which is activated to place a substantially baked insert **12** or **12'** atop the first amount of the chemically-leavened batter layer **14** already in each of the baking plates **208**. As the baking plates **208** continue to advance along the lower tract **204**, the second batter injector **224** is operated to pour a second amount of the chemically-leavened batter layer **14** into each of the baking plates (as described above). Once the second amount of the chemically-leavened batter layer **14** is deposited into each of the baking plates **208**, the baking plates of the upper tract **202** rotate (e.g., counter-clockwise) to securely mate with the baking plates of the lower tract **204**, thereby forming the plurality of bi-molded plate assemblies.

Next, the bi-molded plate assemblies move through the oven **206** for a time and at a temperature sufficient to substantially or completely bake the multi-layered food product **10** or **10'** (as described above). The total bake time is about 30 seconds to about 200 seconds. After the bi-molded plate assemblies pass through the oven **206**, the baking plates of the lower and upper tracts **204** and **202** are separated so that the substantially or completely baked multi-layered food product **10** or **10'** is removed from each of the bi-molded plate assemblies (e.g., by gravity or the automatic removing system **225**) and cooled for an appro-

priate period of time before freezing, wrapping and packaging. The packaged, multi-layered food product **10** or **10'** can be boxed and further frozen ahead of distribution to the marketplace.

From the above description of the invention, those skilled in the art will perceive improvements, changes and modifications. For example, it should be appreciated that the methods described herein comprise a series of acts that may be performed in any sequence, or a subset of acts having any sequence, to obtain the product. Such improvements, changes, and modifications are within the skill of the art and are intended to be covered by the appended claims.

What is claimed is:

1. A method for forming a multi-layered food product comprising:

providing a yeast dough;

providing a filling, said filling having a different composition from said yeast dough;

forming an encrusted intermediate product by encrusting said filling with said yeast dough so that said filling is at least partially encapsulated by said yeast dough;

at least partially proofing said yeast dough of said encrusted intermediate product to form a proofed encrusted intermediate product;

at least partially baking said proofed encrusted intermediate product in a first baking container;

removing said at least partially baked proofed encrusted intermediate product from said first baking container;

providing a leavened batter, said leavened batter having a different composition from said yeast dough and said filling, said leavened batter includes chemical leavening agent, said leavened batter prior to being baked is a pourable batter;

at least partially encapsulating said at least partially baked proofed encrusted intermediate product with said leavened batter to form said multi-layered food product;

baking said multi-layered food product in a second baking container, said baked leavened batter layer forming a soft cake or quick bread-like layer over said yeast dough;

removing said baked multi-layered food product from said second baking container.

2. The method as defined in claim **1**, wherein said first baking container is a first bi-molded plate assembly, and said second baking container is a second bi-molded plate assembly, said first bi-molded plate assembly configured to seal said at least partially baked proofed encrusted intermediate product in a cavity formed by said first bi-molded plate assembly, said second baking container configured to seal said multi-layered food product in a cavity formed by said second bi-molded plate assembly.

3. The method as defined in claim **2**, wherein said step of baking said multi-layered food product in a second baking container includes baking said multi-layered food product for a first period of time, inverting said second baking container after said first period of time, and baking said multi-layered food product for a second period of time.

4. The method as defined in claim **3**, wherein said yeast dough fully encapsulates said filling, said leavened batter fully encapsulates said yeast dough.

5. The method as defined in claim **4**, wherein said leavened batter prior to proofing and baking includes 29-68 wt. % water, 15-40 wt. % flour, up to 30 wt. % egg, 0-17 wt. % sugar, 0-12 wt. % milk powder, 0-15 wt. % oil, 0.5-7 wt. % chemical leavening agent, and 0.5-3 wt. % salt.

6. The method as defined in claim **5**, including the steps of i) cooling said baked multi-layered food product after being removed from said second baking container, and ii) wrapping and freezing said multi-layered food product after said step of cooling.

7. The method as defined in claim **6**, wherein said proofed encrusted intermediate product includes a plurality of finger members that project outwardly from an outer surface of said proofed encrusted intermediate product, said plurality of finger members configured to facilitate in securing said leavened batter to said proofed encrusted intermediate product, said plurality of finger members not extending beyond an outer surface of said leavened batter.

8. The method as defined in claim **7**, wherein said yeast dough is absent chemical-leavening agent and said leavened batter is absent yeast.

9. The method as defined in claim **1**, wherein said step of baking said multi-layered food product in a second baking container includes baking said multi-layered food product for a first period of time, inverting said second baking container after said first period of time, and baking said multi-layered food product for a second period of time.

10. The method as defined in claim **9**, wherein said first period of time is about 10%-50% of a time sufficient to form said multi-layered food product, and said second period of time is about 50%-90% of said time sufficient to form said multi-layered food product.

11. The method as defined in claim **1**, wherein said yeast dough fully encapsulates said filling, said leavened batter fully encapsulates said yeast dough.

12. The method as defined in claim **1**, wherein said leavened batter prior to proofing and baking includes 29-68 wt. % water, 15-40 wt. % flour, up to 30 wt. % egg, 0-17 wt. % sugar, 0-12 wt. % milk powder, 0-15 wt. % oil, 0.5-7 wt. % chemical leavening agent, and 0.5-3 wt. % salt.

13. The method as defined in claim **1**, including the steps of i) cooling said baked multi-layered food product after being removed from said second baking container, and ii) wrapping and freezing said multi-layered food product after said step of cooling.

14. The method as defined in claim **1**, wherein said proofed encrusted intermediate product includes a plurality of finger members that project outwardly from an outer surface of said proofed encrusted intermediate product, said plurality of finger members configured to facilitate in securing said leavened batter to said proofed encrusted intermediate product, said plurality of finger members not extending beyond an outer surface of said leavened batter.

15. The method as defined in claim **1**, wherein said yeast dough is absent chemical-leavening agent and said leavened batter is absent yeast.

16. The method as defined in claim **1**, wherein said step of at least partially baking said proofed encrusted intermediate product is conducted for a time of 20-90seconds at a temperature of 250-450° F.

17. The method as defined in claim **1**, wherein said encrusted intermediate product comprises 15-99 grams of said filling and 12-128 grams of said yeast dough.

18. The method as defined in claim **1**, further comprising shaping said encrusted intermediate product by flattening upper and lower surfaces thereof before said step of proofing.

19. The method as defined in claim **1**, wherein said step of proofing is conducted for a time of 10-60 minutes.

20. The method as defined in claim **1**, wherein said step of baking is conducted for a time of 1-4 minutes at a temperature of 300-450° F.

21. A method for forming a multi-layered food product comprising:

providing a yeast dough;

providing a filling, said filling having a different composition from said yeast dough;

forming an encrusted intermediate product by encrusting said filling with said yeast dough so that said filling is at least partially encapsulated by said yeast dough;

proofing said yeast dough of said encrusted intermediate product to form a proofed encrusted intermediate product;

at least partially baking said proofed encrusted intermediate product in a first baking container;

removing said at least partially baked proofed encrusted intermediate product from said first baking container;

providing a leavened batter, said leavened batter having a different composition from said yeast dough and said filling;

at least partially encapsulating said at least partially baked proofed encrusted intermediate product with said leavened batter to form said multi-layered food product, said step including

i. inserting a first amount of said leavened batter into said second baking container;

ii. placing said at least partially baked proofed encrusted intermediate product into said second baking container so that said at least partially baked proofed encrusted intermediate product is located atop said first amount of said leavened batter;

iii. depositing a second amount of said leavened batter into said second baking container so that said leavened batter substantially or completely envelops said at least partially baked proofed encrusted intermediate product;

baking said multi-layered food product in a second baking container, said step of baking including heating said second baking container for a time and at a temperature sufficient to bake said multi-layered food product; and,

removing said baked multi-layered food product from said second baking container.

22. The method as defined in claim 21, wherein said second baking container comprises a receptacle member and lid member, said receptacle member and said lid member including a cavity, respectively, said cavity of said receptacle member having a volume greater than a volume of said cavity of said lid member, said first amount of said leaven batter deposited in said cavity of said receptacle member.

23. The method as defined in claim 21, further comprising the steps of:

a. mating said lid member with said receptacle member after said second amount of said leavened batter is deposited into said second baking container so that said cavity of said lid member and said receptacle member form a heated and sealed baking cavity; and,

b. baking said multi-layered food product in said heated and sealed baking cavity.

* * * * *